

In the Claims:

1. Canceled.
2. (Currently Amended) A four-wheel drive apparatus for a vehicle, comprising:
an engine for driving a front wheel shaft of the vehicle;
a generator connected to the engine for generating electric current;
a motor driven by the electric current supplied from the generator; and
a clutch interposed between the motor and a rear wheel shaft for transferring a
driving force thereto, ~~The four-wheel drive apparatus of claim 1, further comprising:~~
a first speed sensor for detecting RPM of the front wheel shaft;
a second speed sensor for detecting RPM of the rear wheel shaft; and
a controller,
wherein the controller controls the motor based on a difference between the RPM of the front wheel shaft and that of the rear wheel shaft.
3. (Original) The four-wheel drive apparatus of claim 2, further comprising:
a third speed sensor for detecting RPM of the motor,
wherein the controller controls the clutch based on a difference between the RPM of the rear wheel shaft and that of the motor.
4. (Original) The four-wheel drive apparatus of claim 3, wherein the motor is controlled in a PWM manner.
5. Canceled.
6. (Currently Amended) A four-wheel drive method for driving a rear wheel shaft in addition to a front wheel shaft, comprising:
determining if four-wheel drive is required;
generating electric current utilizing a generator connected to an engine;
driving a motor with electric current supplied from the generator; and
driving the rear wheel shaft with a driving force transferred from the motor through a
clutch, ~~The four-wheel drive method of claim 5, wherein the determining if four-wheel drive~~

is required comprises:

detecting RPM of the front wheel shaft and the rear wheel shaft;

computing a difference between the RPM of the front wheel shaft and that of the rear wheel shaft; and

determining if the computed difference is higher than a predetermined value,

wherein if the difference between the RPM of the front wheel shaft and that of the rear wheel shaft is higher than the predetermined value, four-wheel drive is determined to be required.

7. (Original) The four-wheel drive method of claim 6, wherein the generating of electric current comprises:

computing a torque of the motor required for compensating for the difference between the RPM of the front wheel shaft and that of the rear wheel shaft; and

generating electric current based on the required torque.

8. (Original) The four-wheel drive method of claim 7, wherein the generating electric current is executed in a feedback control manner.

9. (Original) The four-wheel drive method of claim 7, wherein the driving of the motor with electric current supplied from the generator comprises:

detecting RPM of the motor;

applying stator current to a stator of the motor based on the RPM of the motor; and

applying rotor current to a rotor of the motor with the generated electric current from the generator.

10. (Original) The four-wheel drive method of claim 9, wherein the driving of the rear wheel shaft with a driving force transferred from the motor comprises:

determining if the RPM of the motor matches the RPM of the rear wheel shaft;

connecting the motor to the rear wheel shaft through the clutch if the RPM of the motor matches the RPM of the rear wheel shaft; and

accelerating the motor if the RPM of the motor does not yet match the RPM of the rear wheel shaft .